

Re. point V

01 MAY 2006

Reasoned statement with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such a statement

Claim 1 relates to a method for determining a path between a first and a second radio station of a radio communication system over one or several additional radio stations (intermediate stations), i.e. a multihop adhoc network, whereby the path is at least partially determined by a radio installation (base station) at the request of the first radio station.

Such a method is already known from the mentioned document **D1 = Yu-Ching Hsu and Ying-Dar Lin: "Base-Centric Routing Protocol for Multihop Cellular Networks"** (see in particular page 160, chapter "B. Path Maintenance") which is regarded as the closets prior art.

However, the object of claim 1 distinguishes itself from this known method by the fact that, on the one hand, at least one subband of a frequency band subdivided into a number of subbands is assigned to each radio station and, on the other hand, the radio installation communicates to the intermediate stations information about the path, further radio stations of the path and their subbands.

Such a method in which the central radio installation of the intermediate station transmits directly all the information for routing the connection, i.e. without the intermediate station itself having to provide information, in particular information relating to the subbands to be used, is not to be found in the available prior art and is not disclosed by this either individually or in combination, because it is not similar to the prior art. The radio station in accordance with D1 only transmits the path information to the first radio station, which is then informed by the first radio station of the additional intermediate stations. None of

the documents cited describes a transmission of subband information from a radio installation to the intermediate stations of a path.

As a result, the object of claim 1 must be considered as novel and inventive, Article 33 (2), (3) PCT. Likewise, the object of claim 1 is industrially applicable, Article 33 (4) PCT.

In the same way, the above-mentioned findings apply to the **independent claim 11**, which defines a radio station with means for carrying out the method according to claim 1. In addition, this radio station also comprises means for assigning subbands to the radio stations. As a result, claim 11 meets all the requirements of Article 33 PCT.

The **dependent claims 2 to 10** contain advantageous further developments of the object of claim 1 and thereby likewise meet all the requirements imposed with regard to novelty, inventive step and the industrial applicability.

Additional comments

- In the report of the international examination authority, the document **D2 = EP 1 398 910 A1** (from the same applicant) is named as a P-document. Because for this written decision, the applicability of the priority of this application was taken as the starting point, document D2 was not taken into account as the prior art according to Article 33 PCT.

However, for any additional method in accordance with the EPÜ reference is made to the fact that this document D2 was published on 17.03.2004 as a European application and requires the priority dated 13.09.2002.

Therefore, the contents of document D2 in the original

submitted version according to Article 54(3) and (4) EPÜ applies as the priority art, which must be taken into account when testing the novelty.

- The independent claims have not been formulated in the **two-part form** in accordance with rule 6.3 b) PCT. However, in this case, the above-mentioned two-part form does seem to be advantageous. Therefore, the features known in connection with one another from the prior art (D1) belong in the preamble (rule 6.3 b) i) PCT) and the remaining features in the characterizing clause (rule 6.3 b) ii) PCT).
- Contrary to the requirements in rule 5.1 a) ii) PCT, the description contains no introductory description that takes into account documents **D1 and D2**, preferably in a form whereby the inventive idea of the claimed facts of the case is easy to understand.